

**REMARKS**

Applicants have concurrently filed a Request for Continued Examination and, therefore, respectfully request consideration of the above-amendments and following remarks prior to further examination of the present application.

Claims 14 and 18-20 are currently pending in this application. Claim 14 has been amended. Claims 9, 11-13, 16 and 17 have been cancelled. New claims 19 and 20 have been added.

**Applicants' Response to 35 U.S.C. §112 Rejection**

Claims 9, 11, 13, 14, 16, and 18 are rejected under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement. The Examiner objects to the language "consisting essentially of" recited in the claims, stating that Applicants do not teach what is excluded and/or included by this language. Applicants have amended independent claim 14 herein to recite "comprising" rather than "consisting essentially of," which is supported by the specification as originally filed and is not a broadening amendment. Independent claim 9 has been canceled. Therefore, Applicants respectfully submit that this rejection has been overcome.

In addition, the Examiner objects to the deletion of eucalyptus from the claims. Applicants have amended independent claim 14 to recite only fruit flavors, as disclosed on page 4 of the specification, as originally filed. Applicants have added new independent claim 19 herein, which is essentially the same as claim 14, except that it recites only spice flavors, as disclosed on page 4 of the specification, as originally filed. As these claims are each directed only to a specific flavor group, which is supported by the original specification, it is respectfully submitted that the Section 112 rejection based on the deletion of eucalyptus has been overcome.

In view of the above, Applicants respectfully request reconsideration and withdrawal of the Section 112, first paragraph rejections.

**Applicants' Response to 35 U.S.C. §103 Rejections**

Claims 14 and 18 are rejected under 35 U.S.C. §103(a) as allegedly being obvious over U.S. Patent No. 5,372, 824 to Record et al. (hereinafter "Record"). Claims 9, 11, 13, 14, 16, and 18 are rejected under 35 U.S.C. §103(a) as allegedly being obvious U.S. Patent No. 5,009,893 to Cherukuri et al. (hereinafter "Cherukuri"). Applicants respectfully request reconsideration.

The Examiner contends that Record discloses the combination of flavor and N-ethyl-p-menthane-3-carboxamide in the claimed amounts for use in chewing gum. The Examiner acknowledges that "[t]he claims differ as to enhancement and the specific flavors." (Office Action, at page 3). According to the Examiner, however,

It would have been obvious to a person of ordinary skill in the art, at the time the invention was made to use any flavor in that of Record et al because the choice of flavor is seen to be no more than a matter of choice and well-within the skill of the art.

(Office Action, at page 3). The Examiner further asserts that "[e]nhancement would be obvious to that of Record et al as the same components are used." (Office Action, at page 3).

With respect to Cherukuri, the Examiner contends that the reference discloses the combination of a mint and cherry flavor and N-ethyl-p-menthane-3-carboxamide in the amounts claims for use in chewing gum and confections. The Examiner acknowledges that "[t]he claims differ as to enhancement and the specific flavors." (Office Action, at page 4). Similar to the rejection over Record, the Examiner states that:

It would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to use any flavor in that of Cherukuri et al because the choice of flavor is seen to be no more than a matter of choice and well-within the skill of the art.

(Office Action, at page 4).

Applicants have canceled claims 9, 11 and 13, which related to confections, thereby obviating the rejection of these claims over Cherukuri. The remaining claims all are directed to chewing gum.

Applicants have amended independent claim 14 and added new, independent claim 19 herein to further define the invention. In particular, Applicants have amended claim 14 to recite only fruit flavors. New claim 19 is directed only to spice flavors. As recited in each of these claims, N-ethyl-p-menthane-3-carboxamide, a cooling agent commonly referred to as "WS-3", is present in amounts effective to enhance the fruit flavor (in claim 14) or the spice flavor (in claim 19). Record and Cherukuri both fail to disclose or suggest that the combination of small amounts of the cooling agent WS-3, as recited in the claims, and a fruit flavor provides a synergistic flavor effect. Nor does Record or Cherukuri disclose or suggest that the combination of small amounts of WS-3, as recited in the claims, and a spice flavor provides a synergistic flavor effect. Therefore, the cited references fail to disclose or suggest Applicants' claims, as amended herein.

As further support, Applicants submit herewith a declaration under 37 C.F.R. §1.132 executed by Jesse John Kiefer, Ph.D. (hereinafter "Rule 132 declaration").

The Rule 132 declaration shows that the combination of the cooling agent WS-3, in small amounts as recited in the claims, and a fruit or spice flavor exhibited synergistic flavor effects. The addition of small amounts of WS-3 to a fruit or spice flavored chewing gum significantly enhanced the perception of the fruit or spice flavor. This is a synergistic effect

because the cooling agent enhanced the flavor profile of the fruit or spice flavor rather than merely imparting a cooling sensation in addition to the flavor notes of the fruit or spice flavor itself. (Rule 132 declaration; ¶15). Such synergistic effect produced by the combination of small amounts of WS-3 and a fruit or spice flavor was unexpected. (Rule 132 declaration; ¶¶ 8, 15).

The declaration describes comparative tests that were conducted to demonstrate the enhancement of a fruit or spice flavor by the addition of small amounts of WS-3 to chewing gum. These comparative tests also were presented in the specification of the subject application as Example II. The chewing gums tested included a citrus flavored gum, which is a fruit flavored gum, and a cinnamon flavored gum, which is a spice flavored gum. For each flavor type, a control gum was tested, which did not include any WS-3. Two different inventive gums for each flavor were tested in comparison to the control gum. In particular, inventive chewing gums including 0.02 g (or 0.02%) WS-3 in the chewing gum and 0.04 g (or 0.04%) WS-3 in the chewing gum were tested for each flavor.

For the citrus flavored chewing gums tested in the experiments, the declaration explains that 0.02% WS-3 by weight of the chewing gum corresponds to about 1.04% WS-3 by weight of the enhanced flavoring composition itself. (Rule 132 declaration; ¶11). 0.04% WS-3 by weight of the chewing gum corresponds to about 2.06% WS-3 by weight of the enhanced flavoring composition itself. (Rule 132 declaration; ¶11). Accordingly, these chewing gums fall within the range recited for WS-3 in Applicants' claim 14, i.e., about 0.04 to 2.2% by weight of the enhanced flavoring composition.

Similarly, for the cinnamon flavored chewing gums, the declaration explains that 0.02% WS-3 by weight of the chewing gum corresponds to about 1.10% WS-3 by weight of the enhanced flavoring composition itself. (Rule 132 declaration; ¶12). 0.04% WS-3 by weight of the chewing gum corresponds to about 2.17% WS-3 by weight of the enhanced flavoring

composition itself. (Rule 132 declaration; ¶12). Accordingly, these chewing gums fall within the range for WS-3 recited in Applicants' claim 19, i.e., about 0.04 to 2.2% by weight of the enhanced flavoring composition.

As described in the declaration, a taste panel compared the control and inventive chewing gums for each flavor and reported the results. In particular, the panel evaluated the chewing gums for perceived flavor differences and flavor liking. (Rule 132 declaration; ¶13). The inventive chewing gums for each flavor exhibited enhanced flavor effects. (Rule 132 declaration; ¶14). More specifically, for the citrus flavored chewing gums, both the gums containing 0.02% and 0.04% WS-3 by weight of the chewing gum exhibited a more defined citrus flavor than the control gum. (Rule 132 declaration; ¶14). This more defined citrus flavor represents an enhanced flavor perception as the consumer perceives a flavor more similar to that of real fruit. (Rule 132 declaration; ¶14). Similarly, with respect to the cinnamon flavored chewing gums, a more defined cinnamon spice flavor was perceived for the chewing gums containing 0.02% and 0.04% WS-3 by weight of the gum as compared to the control gum. (Rule 132 declaration; ¶14). Such more defined cinnamon spice flavor represents an enhanced flavor perception as it provides the consumer with a flavor more similar to that of ground cinnamon and spices. (Rule 132 declaration; ¶14).

Although some slight off-notes began to be perceived in both flavored gums at the 0.04% WS-3 level, the enhancement of the citrus and cinnamon spice flavors was still perceived. (Rule 132 declaration; ¶14). As explained in the declaration, however, it is anticipated that even higher amounts of WS-3, beyond the amounts recited in Applicants' claims, would produce more pronounced off-notes. Accordingly, based on these results, using amounts of WS-3 beyond those recited in Applicants' claims would no longer provide enhancement of the fruit or spice flavor in chewing gum. (Rule 132 declaration; ¶14).

On the basis of these comparative test results, the declarant explains that:

the experiments demonstrate that using small amounts of the cooling agent WS-3, as recited in the claims, in combination with a fruit or spice flavor produces an enhancement of the fruit or spice flavor in chewing gum. This is a synergistic effect between the WS-3 and the fruit or spice flavor. One would expect an additive effect, i.e., a flavor profile including flavor notes along with a cooling sensation. The synergistic effect derives from an enhanced flavor profile with more defined flavor notes rather than an additive effect.

(Rule 132 declaration; ¶15).

With respect to Record and Cherukuri, the declarant further explains that:

The U.S. patents cited in the Examiner's Office Action dated May 15, 2007 do not contain any teaching relating to a possible synergy between WS-3 and fruit or spice flavors. Moreover, it was known that cooling agents, particularly menthol, can even reduce the perception of certain flavors. In particular, menthol has a bitter taste, which is known to distort flavors.

(Rule 132 declaration; ¶15).

In view thereof, the declarant concludes that:

the enhancement of a fruit or spice flavor in chewing gum by adding small amounts of the cooling agent WS-3 as demonstrated by this experiment was unexpected.

(Rule 132 declaration; ¶15).

In view of the showings in the Rule 132 declaration, the combination of small amounts of the cooling agent WS-3, as recited in Applicants' claims, with a fruit or spice flavor in

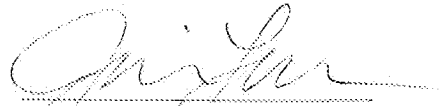
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chewing gum significantly enhances the flavor profile. This is a synergistic effect between the cooling agent WS-3 and the fruit or spice flavor. Such results were unexpected to a person of ordinary skill in the art. Record and Cherukuri are wholly devoid of any teaching or suggestion of synergistic flavor effects between WS-3 and fruit or spice flavors. In view thereof, there would be no apparent reason for one of ordinary skill in the art to combine small amounts of WS-3 with a fruit or spice flavor to achieve a chewing gum providing an enhanced flavor perception, as recited in Applicants' claims.

Therefore, Applicants respectfully submit that the obviousness rejections over Record and Cherukuri have been overcome, and claims 14 and 18-20 are patentable over the cited references.

Favorable action is earnestly solicited. If there are any questions or if additional information is requested, the Examiner is respectfully requested to contact Applicants' attorney at the number listed below.

Respectfully submitted,



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